

WHAT IS CLAIMED IS:

- 1 1. A method for coordinating charging information in a communications network,
2 the method comprising:
3 establishing a communication connection;
4 generating a globally unique charging identification in a first network element and
5 associating said globally unique charging identification with said communication
6 connection; and
7 sending said globally unique charging identification from said first network
8 element to a second network element.
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- 1 2. The method of claim 1, wherein said second network element uses said
globally unique charging identification to collect charging information.
- 1 3. The method of claim 1, wherein said globally unique charging identification
2 includes the address of the first network element.

1 4. The method of claim 1, wherein said communication channel is a Packet Data
2 Protocol (PDP) context.

1 5. The method of claim 1, wherein said globally unique charging identification is
2 generated by a GGSN.

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1 6. The method of claim 1, wherein said first network element is a Mobile Station
2 (MS).

1 7. The method of claim 1, wherein said first network element is a Serving GPRS
2 Support Node (SGSN).

1 8. The method of claim 1, wherein said first network element is a Gateway
2 GPRS Support Node (GGSN).

1 9. The method of claim 1, wherein said second network element is a Call State
2 Control Function (CSCF).

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1 10. The method of claim 1, wherein said second network element sends said
2 globally unique charging identification towards an endpoint of a communication.
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1 11. The method of claim 10, wherein said second network element sends said
2 globally unique charging identification to a second network.

1 12. The method of claim 10, wherein said second network collects charging data
2 using said globally unique charging identification and prepares billing using the collected
3 charging data.

1 13. The method of claim 12, wherein said second network collects charging data
2 from a plurality of call detail records associated with said globally unique
3 charging identification.

1 14. A method for coordinating information between a transport layer and an
2 application layer in a communications network, the method comprising:
3 initiating a transaction in a first network element in an application layer;
4 assigning a tuple for each communication connection within said transaction;
5 initiating a communication connection in said first network element in said application
6 layer; and
7 associating said communication connection with said transaction using said tuple or
8 tuple pair.

1 15. The method of claim 14, wherein said tuple or tuple pair is forwarded to a
2 second network element in said application layer.

1 16. The method of claim 15, wherein said tuple or tuple pair is forwarded to a third
2 network element and a fourth network element in a transport layer.

1 17. The method of claim 16, wherein charging information generated by said fourth
2 network element and said third network element in said transport layer and by the second
3 network element in said application layer is associated with said tuple or tuple pair.

1 18. The method of claim 14, wherein said tuple includes a destination IP address
2 and port information of a transaction specific media connection.

1 19. The method of claim 15, wherein said second network element is a CSCF.

1 20. The method of claim 16, wherein said third network element is a SGSN and
2 said fourth network element is a GGSN.

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1 21. The method of claim 17, wherein said charging information is a CDR.

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1 22. The method of claim 14, wherein said communication connection is a Packet
2 Data Protocol (PDP) context.

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1 23. The method of claim 14, wherein said transaction is a call.

1 24. A system for coordinating information between an application layer and a
2 transport layer, the system comprising:

3 means for initiating a transaction in a first network element in an application layer;
4 means for assigning a tuple or tuple pair to said transaction;
5 means for initiating a communication connection in said first network element in said
6 application layer; and
7 means for associating said communication connection with said transaction using
8 said tuple or tuple pair.

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